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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,392	02/06/2004	Sherif Yacoub	200310469-1	6342

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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
3404 E. Harmony Road
Mail Stop 35
FORT COLLINS, CO 80528

EXAMINER	
SAINT CYR, LEONARD	

ART UNIT	PAPER NUMBER
2626	

NOTIFICATION DATE	DELIVERY MODE
10/19/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

JERRY.SHORMA@HP.COM
ipa.mail@hp.com
jessica.l.fusek@hp.com

Office Action Summary	Application No.	Applicant(s)	
	10/773,392	YACOUB ET AL.	
	Examiner	Art Unit	
	LEONARD SAINT CYR	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 July 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6, 9 -13, 15-18, 21, and 22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6, 9 -13, 15-18, 21, and 22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02/06/04* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Re-open Prosecution After Appeal Brief

1. In view of the supplemental appeal brief filed on 07/13/09, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below.

/Richemond Dorvil/
Supervisory Patent Examiner, Art Unit 2626

Response to Arguments

2. Applicant's arguments with respect to claims 1 – 6, 9 – 13, 15 - 18, 21, and 22 have been considered but are moot in view of the new ground(s) of rejection.

Appellant argues that neither Endo nor Watanabe et al., teach or suggest that the first speech recognition engine permits a plurality of ports to be used on behalf of a plurality of users and the system further comprises a port monitor coupled to the first speech recognition engine and to the evaluation logic, wherein the port monitor determines a number of currently available ports and, based on the number of currently available ports exceeding a threshold, cause the first speech recognition engine to be selected and used (Appeal brief, pages 11, and 12).

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 15 - 18 are rejected under 35 USC 101 as not falling within one of the four statutory categories of invention. While the claims recite a series of steps to be performed, a statutory process under 35 USC 101 must be tied to another statutory category (such as a manufacture or a machine) or transform underlying subject matter (such as an article or material) to a different state or thing. The steps in those claims can be performed manually without the use of a particular machine. Those claims could be interpreted as listening to a caller, and based on his/her accent selecting an appropriate speech recognizer; and selecting the same speech recognizer for another caller with similar accent based on ports availability of the speech recognizer. Thus, claims **15 - 18** do not define a statutory process.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1 – 4, 6, 9 – 13, 15 –18, 21, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Endo et al., (US Patent 7,228,275) in view of Lo et al., (US Patent 6,798,786).

As per claims 1, and 9, 15, and 21, Endo et al., teach a system/method, comprising:

a first speech recognition engine; a second speech recognition engine (Abstract, lines 1 – 3); and

evaluation logic ("decision module") coupled to the first and second speech recognition engines, the evaluation logic evaluates the first and second speech recognition engines based on evaluation signals from a user and, based in part on the evaluation, selects one of said speech recognition engines to process additional speech signals from the user (Abstract, col.2, lines 28 – 48).

However, Endo et al., do not specifically teach the first speech recognition engine permits a plurality of ports to be used on behalf of a plurality of users and the system further comprises a port monitor coupled to the first speech recognition engine and to the evaluation logic, wherein the port monitor determines a number of currently available ports and, based on the number of currently available ports exceeding a threshold selecting and using the first speech recognition engine.

Lo et al., teach a method of managing calls in a telephony system includes defining a **plurality of communities each including one or more communication endpoints and assigning one or more usage threshold values to a link between communities**. Further, a call request is process based on the one or **more usage threshold values.** Proper **selection of resource elements as well** as call admission control reduces the likelihood of overburdening links between terminals. **M_l, which represents threshold at which reselection...resource element is performed to reduce load on a link in a community** (**by reselecting resource elements during calls managements based on usage threshold values**, it is obvious that a single speech recognizer can be selected based on ports availability, since speech recognizers are considered as resources elements in communication system; col.2, lines 4 – 23; col.14, lines 62 – 65).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to determine usage availability as taught by Lo et al., in Endo et al., because that would help optimize quality of the service while at the same time taking into account the usage of data network as well as usage of…communications resources (col.2, lines 12 – 16).

As per claims 2, 10, Endo et al., in view of Lo et al., further disclose a switch coupled to the first and second speech recognition engines and the evaluation logic, wherein, based on the evaluation, the evaluation logic causes the switch ("PSTN") to release a connection to the speech recognition engine that was not selected (Endo et

al; "selects the speech text with the highest raw confidence score…for controlling the back-end application"; col.6, lines 20 – 24; Lo et al., col.1, line 29).

As per claim 3, Endo et al., in view of Lo et al., further disclose a communications mechanism and, based on the evaluation, the evaluation logic selects the communications mechanism that is not the first or second speech recognition engines (Endo et al; "**decision module also defaults to the recognized speech text of a predetermined recognizer**"; col.6, lines 55 - 62).

As per claim 4, Endo et al., in view of Lo et al., further disclose if the number of currently available ports does not exceed the threshold, comparing outputs from the first and second speech recognition engines, and selecting the second speech recognition engine if the outputs are identical (Endo et al; "**confidence scores are the same, one of the recognized speech texts with the same highest confidence scores is selected**"; col.8, lines 34 – 37).

As per claim 6, Endo et al., in view of Lo et al., further disclose if the number of currently available ports does not exceed the threshold, the evaluation logic receives a first confidence score from the first speech recognition engine and a second confidence score from the second speech recognition engine and selects the second speech recognition engine if the confidence score of the second speech recognition engine is equal to or higher than a threshold (Endo et al; "**confidence scores are the same, one**

of the recognized speech texts with the same highest confidence scores is selected" col.2, lines 45 – 48; col.8, lines 42 - 48).

As per claims 11, and 16, Endo et al., in view of Lo et al., further disclose means for evaluating a parameter comprises means for assessing the relative accuracy of the first and second means for recognizing speech ("The first speech recognizer recognizes … **first confidence score indicating the level of accuracy of the first speech text**. Likewise, the second speech recognizer also recognizes…**a second confidence score indicating the level of accuracy of the second speech text**"; Endo et al., col.2, lines 38 – 45).

As per claims 12, and 17, Endo et al., in view of Lo et al., further disclose the means for evaluating a parameter comprises means for assessing the relative performance of the first and second means for recognizing speech ("**the decision module selects either** the first speech text or the second speech text as the output speech text depending **upon which of the first and second confidence scores is higher**"; Endo et al., col.2, lines 45 – 48; col.11, lines 4 - 6).

As per claims 13, and 18, Endo et al., in view of Lo et al., further disclose the first and second means for recognizing speech comprise a means for determining a confidence score associated with the voice input ("The first speech recognizer recognizes … **first confidence score indicating the level of accuracy of the first**

speech text. Likewise, the second speech recognizer also recognizes…**a second confidence score indicating the level of accuracy of the second speech text**"; Endo et al., col.2, lines 38 – 45).

As per claim 22, Endo et al., in view of Lo et al., further disclose if the number of available ports is below the threshold, by performing an action selected from the group consisting of comparing a relative accuracy of the first and second speech recognition engines, comparing the relative performance of the first and second recognition engines, and comparing a confidence score generated by the first and second speech recognition engines and a combination thereof ("The first speech recognizer recognizes … **first confidence score indicating the level of accuracy of the first speech text**. Likewise, the second speech recognizer also recognizes…**a second confidence score indicating the level of accuracy of the second speech text. the decision module selects either** the first speech text or the second speech text as the output speech text depending **upon which of the first and second confidence scores is higher**"; Endo et al., col.2, lines 38 – 48).

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Endo et al., (US Patent 7,228,275) in view of Lo et al., (US Patent 6,798,786), and further in view of Kemble et al., (US Patent 7,072,837).

As per claim 5, Endo et al., in view of Lo et al., do not specifically teach that the evaluation logic determines a response time for each of the first and second speech

recognition engines and selects the second speech recognition engine if the response time of the second speech recognition engine is equal to or shorter than the response time of the first speech recognition engine.

Kemble et al., teach that the processing tasks can be allowed only a predetermined and limited amount of time for completion. Specifically, the speech recognition system can restrict the selection of recognition results to only those from possible recognition results provided by the processing tasks which complete execution within the predetermined time limit (col.7, lines 51 – 57).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to consider response time in speech recognition systems as taught by Kemble et al., in Endo et al., in view of Lo et al., because the response time is more critical than the accuracy of the speech recognition (col.7, lines 50, and 51).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please PTO-892 Form.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEONARD SAINT CYR whose telephone number is (571) 272-4247. The examiner can normally be reached on Mon- Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571) 272-7602. The fax phone

number for the organization where this application or proceeding is assigned is (571)-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or (571) 272-1000.

LS
10/08/09

/Richemond Dorvil/
Supervisory Patent Examiner, Art Unit 2626